

cgaggagcga	cggccggacc	cagacccaga	cgcaagatgg	cgacggccgc	gtgactgcct	60
caggatcccc	gaggtcggt	ccgagtgcac	ctacggactg	actgtgggg	cagagaaggg	120
cgagatcagg	actctgttt	tgttaatcgt	gactgcatga	aggtcggcct	cctcgggct	180
acttgggg	agtgtctgg	attgttctaa	ggccaggaggc	acggtgaggc	acagtctgtt	240
ggtagaaatt	ggcgcttga	tagttgagaa	a atg gcg	atg aca ctg	ttg gaa	292
			Met Ala	Met Thr	Leu Leu	Glu
			5			
1						
gac tgg	tgc cgg	ggg atg	gtg aac	tcc cag	aga act	340
Asp Trp	Cys Arg	Gly Met	Asn Val	Arg Ser	Gln Arg	
10	15	20				
tgg ggc	atc cca	gtg aac	tgt gat	gag gct	gaa atc	388
Trp GLY	Ile Pro	Val Asn	Cys Asp	Glu Ala	Glu Ile	
25	30	35				
cag gct	gtg ccc	cag gtc	tcc tac	cga atg	ctt ggg	436
Gln Ala	Ala Met	Pro Gln	Val Ser	Tyr Arg	Met Leu	
40	45					
tgg agg	gaa aat	gct gca	aaa gca	gcc tta	tta gag	484
Trp Arg	Glu Glu	Asn Ala	Lys Ala	Leu Ala	Leu Thr	
60	65					
gta gat	tac gcc	gtc atc	ccc agg	gag atg	ccg ggc	532
Val Asp	Tyr Ala	Ala Ile	Pro Arg	Glu Met	Pro Lys	
75	80					
tgg aaa	gtg tta	ttt aag	ccc cca	act tct	gat gct	580
Trp Lys	Val Leu	Phe Lys	Pro Pro	Thr Ser	Asp Ala	
90	95					
aga ttg	cac ctc	tta gct	aga gag	ggg tgg	acc gtg	628
Arg Leu	His Leu	Phe Leu	Ala Arg	Glu Gly	Trp Thr Val	
105	110					

FIG. 1A

676
gcc cgt gtc ctt ggg ttt cag aac cct act ccg acc ccc ggc cca gag
Ala Arg Val Leu Gly Phe Gln Asn Pro Thr Pro Gly Pro Glu
120 125 130 135
724
atg cca gca gag atg cta aac tat att ttg gat aat gtt att cag cct
Met Pro Ala Glu Met Leu Asn Tyr Ile Leu Asp Asn Val Ile Gln Pro
140 145 150 155
772
ctt gtt gag tcc ata tgg tac aag agg ctg aca ctt ttc tcg ggg aag
Leu Val Glu Ser Ile Trp Tyr Lys Arg Leu Thr Leu Phe Ser Gly Lys
160 165 170 175
820
gga cat ccc agg gcc tgg aga gga aac ttt gat ccc tgg ctg gag cac
Gly His Pro Arg Ala Trp Arg Gly Asn Phe Asp Pro Trp Leu Glu His
170 175 180 185
868
act aat gag gtc cta gag gag tgg cag gtg tcc gat gta gaa aag agg
Thr Asn Glu Val Leu Glu Glu Trp Gln Val Ser Asp Val Glu Lys Arg
185 190 195 200
916
cgg cgg ttg atg gag agt ctt aga ggc ccc ggc gct gat gtt att cgc
Arg Arg Leu Met Glu Ser Leu Arg Gly Pro Ala Ala Asp Val Ile Arg
205 210 215 220 225 230
964
atc ctt aag tcc aac aac ccc gcg ata acc act gcc gaa tgc ctg aag
Ile Leu Lys Ser Asn Asn Pro Ala Ile Thr Thr Ala Glu Cys Leu Lys
235 240 245 250
1012
gcg ctt gag cag gtg ttt ggg agc gtt gag agc tct agg gat gcc gag
Ala Leu Glu Gln Val Phe Gly Ser Val Glu Ser Ser Arg Asp Ala Gln
235 240 245 250

FIG. 1B

atc aaa ttt ctg aac act tat cag aac ccg gga gaa aaa ttg tct gct	1060
Ile Lys Phe Leu Asn Thr Tyr Gln Asn Pro Gly Glu Lys Leu Ser Ala	
250	
255	
tat gtc att cgt ctg gag cct ctg cta cag aag ttg gta gag aag ggg	1108
Tyr Val Ile Arg Leu Glu Pro Leu Gln Lys Val Val Glu Lys Gly	
260	
265	
gcc att gat aaa gat aat ttg aac cag gcc cgc cta gag cag gtc att	1156
Ala Ile Asp Lys Asn Val Asn Gln Ala Arg Leu Glu Gln Val Ile	
270	
275	
gcc ggg gcc aac cac agc ggg gcc atc cga agg cag ctg tgg ctt acc	1204
Ala Gly Ala Asn His Ser Gly Ala Ile Arg Arg Gln Leu Trp Leu Thr	
280	
285	
ggg gct ggg gaa ggg cca ggc ccc aaa cct ctt tca gtt gct ggt gca	1252
Gly Ala Gly Glu Pro Gly Pro Lys Pro Leu Ser Val Ala Gly Ala	
300	
305	
310	
315	
320	
gat ccg tgaggaggaa gcccaggagg gaggaggagg aggctgaggc cacccttctg	1308
Asp Pro	
cagttaggcc tggaaaggca ttctctgactg ccaggaaagg cagcttttagt gcaggacctag	1368
atcacagcta cttttctgt ccctgtgggg tcttacagat gtgtctctga gtagtaaagg	1428
cttagcccttg ttctgttttg ttgttttttg gaggggaaagg tttagtcaggc cttagtattc	1488
atgttaacatt ctaaaatgt gcoagcggc accgtgaacg actgcaatgc aagggggtct	1548
tgctggctaa aatggcccagg taaaagggttg gttggacaca gggcttttagt cacgctgtca	1608
tcatggacat cataatcagt tgtgaaaaac acgcaaacct atgacactc ttatccaca	1668
ctgaatgtga aatttgcatt tcagatgtt nactacgagg cttggctcac aggaatgtt	1728
cagtaaaatg atgcactgtt agattactga taacggat agatttttgt ttaccataaa	1788
ttgttccaga tttatattaa tggaaaggaa ttagtcttta ttcaacttta	1848
caatgcaaac atcttatttc tcatcttta acatgtcgac cagtttaatt gaaaagtatt	1908
ctgagactgc aaaatgggtt gtaaaaaat actgcgttta cggagctgtg taaaaccagg	1968
tctcaattgca taagatcacag atgtaaatgg catggaggagg ttgatatgca cctgtacagt	2028
aattcactcc cccatttcac ttctttgtca gagaatagt ttgttccata ctgagtgttc	2088
taaatttggaa gtttatata caaattaaa tattttaaaa aaaaaaaaaaaa g	2139

FIG. 1C

ccc	ctg	gca	ctg	tta	gag	tgc	tgg	ata	atg	agt	gtg	gat	gag	48	
Pro	Leu	Ala	Ileu	Leu	Glu	Asp	Trp	Cys	Arg	Ile	Met	Ser	Val	Asp	Glu
1				5					10					15	
cag	aag	tca	ctg	atg	gtt	acc	ggg	ata	ccg	gct	ttt	gag	gag	96	
Gln	Lys	Ser	Ileu	Met	Val	Thr	Gly	Ile	Pro	Ala	Asp	Phe	Glu	Ala	
20					25				30						
gag	att	cag	gag	gtc	ctt	cag	act	tta	aag	tct	ctg	ggc	agg	tat	
Glu	Ile	Gln	Glu	Val	Ileu	Gln	Glu	Thr	Leu	Lys	Ser	Leu	Gly	Arg	Tyr
35					40				45					144	
aga	ctg	ctt	ggc	aag	ata	ttc	cgg	aag	cag	aat	gcc	aat	gtc	192	
Arg	Leu	Ileu	Gly	Lys	Ile	Phe	Arg	Lys	Gln	Glu	Asn	Ala	Asn	Ala	Val
50					55				60						
tta	cta	gag	ctt	ctg	gaa	gat	act	gat	gtc	tcg	gcc	att	ccc	agt	gag
Leu	Leu	Glu	Leu	Leu	Glu	Asp	Thr	Asp	Val	Ser	Ala	Ile	Pro	Ser	Glu
65					70				75					80	
gtc	cag	gga	aag	ggg	ggt	gtc	tgg	aaa	gtg	atc	ttt	aag	acc	cct	aat
Val	Gln	Gly	Lys	Gly	Gly	Val	TriP	Lys	Val	Ile	Phe	Lys	Thr	Pro	Asn
85					90				95						288

FIG. 2A

cag	gac	act	gag	ttt	ctt	gaa	aga	ttg	aac	ctg	ttt	ctt	gaa	aaa	gag	336
Gln	Asp	Thr	Glu	Phe	Leu	Glu	Arg	Leu	Asn	Leu	Phe	Leu	Glu	Lys	Glu	110
100																105
ggg	cag	acg	gtc	tgc	ggt	atg	ttt	cga	gcc	ctg	ggg	cag	gag	gag	ttg	384
Gly	Gln	Thr	Val	Ser	Gly	Met		Phe	Arg	Ala	Leu	Gly	Gln	Glu	Ala	Leu
115																120
tct	cca	gcc	aca	gtg	ccc	tgc	atc	tca	cca	gaa	tta	ctg	gcc	cat	ttg	432
Ser	Pro	Ala	Thr	Val	Pro	Cys	Ile	Ser	Pro	Glu	Leu	Leu	Ala	His	Leu	
130																135
ttg	gga	cag	gca	atg	gca	cat	gcg	cct	cag	ccc	ctg	ctt	ccc	atg	aga	480
Leu	Gly	Gln	Ala	Met	Ala	His	Ala	Pro	Gln	Pro	Leu	Leu	Pro	Met	Arg	
145																150
tac	cgg	aaa	ctg	cga	gtt	tcc	tca	ggg	agt	gtc	cca	gca	gag	528		
Tyr	Arg	Lys	Leu	Arg	Val	Phe	Ser	Gly	Ser	Ala	Val	Pro	Ala	Pro	Glu	
165																170
gaa	gag	tcc	ttt	gag	gtc	tgg	ttg	gaa	cag	gcc	acg	gag	ata	gtc	aaa	576
Glu	Glu	Ser	Phe	Glu	Val	Trp	Leu	Glu	Gln	Ala	Thr	Glu	Ile	Val	Lys	
180																185
gag	tgg	cct	tga	aca	cac	aaa	aaaa	615								
Glu	Trp	Pro														195

FIG. 2B

FIG. 3A

Ma2	.TAGAAAAAGGGGAGACGGTCTCGG .GTATGTTCGGGCCTGGGAGGGCAGGGTGTCTGCCACAGTCAGCTGC .AT	407
Ma1	.TAGGtAGAGGGGtggGACC GTgcaAG .atgttgcctGttGGAaccctactccgacccc .GggccacagAT	1071
mouse	tTGGggAACA....CAGACTGctTGGGaggATGT.....CAGGG .GatGagaacAAgaAtgttaGCCCCG .AT	374
Ma2	CTCACCGAGATTACTGGCCATTTGGGACAGGCAATGGCACATGGCCTCAGGCCCTGCTAC...CCATG .AGATAACGGAA	488
Ma1	gcCAGCAGGatgtGCTaaactATAttttGataAtGttAT.....TCAGGCTtCTtgttagtccCATa.tGgttCAaagAG	1143
mouseAtTGGGCTtacaGAGACTGGCAGTGCCTGGTCC...ccAaggaaATAACCTGCA	427
Ma2	ACTGGGAGTATTCTCAGGGA .GtGCTGTCCCAGCCCC...AGAGGAAGAGTC .CTTTGAGGGTCTGGTGGAAACGGCCACGGAGA	568
Ma1	gCTGacACTTTCTCAGGGAAaggGacatCCAGggctggAGGGAAa....CTTTGATccCTGGCTGGAGCACactAatGAGG	1223
mouse	AaaG .GAGGtgtCTG .GAGA .GtGatcTTtaAGCCtCCtgAtActgAtAGTgactTTtGtgCaGATaaAttgAG	499
Ma2	TAGTCAAAGAGTGGCCTTGAACACAACCAAAAAAAAG	615
Ma1	TccTAGAGGAGTGGC.....AggtgtCCGA>	1248
mouse	TtttAAAGGGGG....aGggCATgACgtgggtGAAtt>	534

FIG. 3B

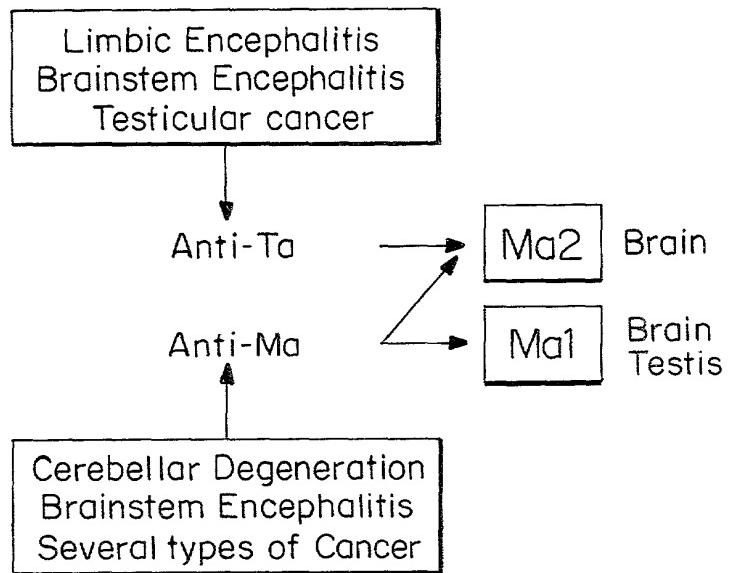


FIG. 4

gac ctc atg cac ata gtg cag gca gac aac ccg tcc atc agt gta gaa 49
Asp Leu Met His Ile Val Gln Ala Asp Asn Pro Ser Ile Ser Val Glu
1 5 10 15

gag tgt ttg gag gcc ttt aag caa gtg ttt ggg agc cta gag agc cgc 97
Glu Cys Leu Glu Ala Phe Lys Gln Val Phe Gly Ser Leu Glu Ser Arg
20 25 30

agg aca gcc cag gtg agg tat ctg aag ccc tat cag gag gaa gga gag 145
Arg Thr Ala Gln Val Arg Tyr Leu Lys Pro Tyr Gln Glu Glu Gly Glu
35 40 45

aag gtc tca ggc tat gtg tta cgg cta gaa acc ctg ctc cgg aga gcg 193
Lys Val Ser Ala Tyr Val Leu Arg Leu Glu Thr Leu Arg Arg Ala
50 55 60

gtg gag aaa cgc gcc atc cct cgg cgt att gcg gac cag gtc cgc ctg 241
Val Glu Lys Arg Ala Ile Pro Arg Arg Ile Ala Asp Gln Val Arg Leu
65 70 75 80

FIG. 5A

gag cag gtc atg gct ggg gcc act ctt aac cag atg ctg tgg tgc cggt Glu Gln Val Met Ala Gly Ala Thr Leu Asn Gln Met Leu Trp Cys Arg	90	337
ctt agg gag ctg aag gat cag ggc ccg ccc agc ttc ctt gag cta Leu Arg Glu Ile Lys Asp Gln Gly Pro Pro Ser Phe Leu Glu Leu	100	385
atg aag gta ata cgg gaa gag gag gaa gag ggc tcc ttg gag aat Met Lys Val Ile Arg Glu Glu Glu Glu Ala Ser Phe Glu Asn	115	433
gag agt atc gaa gag cca gag gaa cga gat ggc tat ggc cgc tgg aat Glu Ser Ile Glu Pro Glu Glu Arg Asp Gly Tyr Arg Trp Asn	130	488
cat gag gga gac gac tgaaaaaccac ctggggcag gacccacagc cagtgggcta His Glu Gly Asp Asp	145	548
agaaccttaa aaaattttt tcttttaatgt atggactga aatcaaaccat gaaaggccaa ttatttgacctt ccctttccctt tcctttccctt ctgtttttttt tttaaaacc ctgttttttgg gtgggtgtgg gtataatact tcttctccctt gatataatctt acggggaaag gggcttttgtg aagttaggcct tattttctttt actccggctt gacctggatt gaactcgat acaggaggaa atttgaagta gatagaaccc gacccatggattt acctttaataa ggggg cacqtaggac tttaatcggtt gaaacaaacgg acctttaataa ggggg	608 668 728 788	

FIG. 5B

g gtc cag gga aag	999	gtt gtc tgg aag	999	gtg atc	999	ttt aag acc	999	cct aat	999
Val Gln Gly Lys	5	Gly Val Trp Lys	10	Ile Asn	15				
cag gag act gag	20	ttt ctt gaa aga	20	tta aac	25	ctg ttt cta	25	gaa aaa gag	25
Gln Asp Thr Glu	25	Phe Leu Glu Arg	30	Leu Asn	35	Leu Phe Leu	35	Glu Lys Glu	35
ggg cag acg gtc	35	tcc tgg atg	35	ttt cga gcc	40	ctg ggg cag	40	gag ggc gtg	40
Gly Gln Thr Val	40	Ser Gly Met	45	Phe Arg Ala	45	Leu Gly Gln	45	Glu Gly Val	45
tct cca gcc aca	50	gttg ccc tgc	50	atc tca cca	55	gaa ttatcg	55	gcc cat ttg	55
Ser Pro Ala Thr Val	55	Pro Cys Ile Ser	60	His Ala Pro	65	Glu Leu Ala His	65	Leu His Leu	65
ttg gga cag gca	65	atg gca cat	70	gct cag	75	ccc ctg cta	75	atg aga	75
Leu Gly Gln Ala	70	Met Ala His Ala	75	Pro Gln	80	Pro Leu	80	Met Arg	80
tac cgg aaa ctg	85	cga gta ttc	85	tca	90	ggg agt	90	gtc cca	90
Tyr Arg Lys Leu	90	Arg Val Phe Ser	95	Gly Ser Ala Val	95	Gly Pro Ala	95	Glu Pro Glu	95

FIG. 6A

gaa	gag	tcc	ttt	gat	gtc	tgg	tgg	gaa	cac	gcc	cac	gag	ata	gtc	aaa
Glu	Glu	Ser	Phe	Glu	Val	Trp	Leu	Glu	Gln	Ala	Thr	Glu	Ile	Val	Lys
100															337
gag	tgg	cca	gtt	aca	gag	gca	gaa	aag	aaa	agg	tgg	cgt	gct	gaa	arg
Glu	Trp	Pro	Val	Thr	Glu	Ala	Glu	Lys	Lys	Arg	Trp	Leu	Ala	Glu	Ser
115															385
ctg	cgg	ggc	cct	gcc	ctg	gac	ctc	atg	cac	ata	gtg	cag	gca	gac	aac
Leu	Arg	Gly	Pro	Ala	Leu	Asp	Leu	Met	His	Ile	Val	Gln	Ala	Asp	Asn
130															433
ccg	tcc	atc	agt	gtt	gaa	gag	tgt	gag	gcc	ttt	aag	caa	gtg	ttt	
Pro	Ser	Ile	Ser	Val	Glu	Glu	Cys	Leu	Glu	Ala	Phe	Lys	Gln	Val	Phe
145															
ggg	agc	cta	gag	agc	cgc	agg	aca	gcc	cag	gtg	agg	tat	ctg	aag	acc
Gly	Ser	Leu	Glu	Ser	Arg	Arg	Thr	Ala	Gln	Val	Arg	Tyr	Leu	Lys	Thr
165															529
tat	cag	gag	gaa	gga	gag	aag	gtc	tca	gcc	tat	gtg	tta	cgg	cta	gaa
Tyr	Gln	Glu	Glu	Gly	Glu	Lys	Val	Ser	Ala	Tyr	Val	Leu	Arg	Leu	Glu
180															577

FIG. 6B

acc ctc cgg aaa gcg tgc gag aaa cgc gcc atc cct cgg cgt att 625
Thr Leu Arg Lys Ala Val Glu Lys Arg Ala Ile Pro Arg Arg Ile
Ala Asp Gln Val Arg Leu Glu Gln Val Met Ala Gly Ala Thr Ileu Asn
195 200 205

gcg gac cag gtc cgc ctg gag cag gtc atg gct 999 gcc act ctt aac 673
Gln Asp Gln Val Arg Leu Arg Leu Glu Gln Val Met Ala Gly Ala Ile Pro Arg Arg Ile
210 215 220

cag atg ctg tgg tgc cgg ctt agg gag ctg aag gat cag ggc cgc ccc 721
Gln Met Leu Trp Cys Arg Leu Arg Glu Leu Lys Asp Gln Gly Pro Pro
225 230 235

ccc agc ttc ctt gag cta atg aag gta ata cgg gaa gag gaa gaa gaa 769
Pro Ser Phe Leu Glu Leu Met Lys Val Ile Arg Glu Glu Pro Glu Arg Asp
245 250 255

gag gcc tcc ttt gag aat gag agt atc gaa gag cca gag gaa cga gat 817
Glu Ala Ser Phe Glu Asn Glu Ser Ile Glu Glu Pro Glu Arg Asp
260 265 270

ggc tat ggc cgc tgg aat cat gag gga gac gac tgaaaaccac ctggggcag 870
Gly Tyr Arg Trp Asn His Glu Gly Asp Asp
275 280

gacccacagg cagtgggcta agacctttaa aaaaattttt tcttttaatgt atggactgaa 930
aatcaaaccat gaaaggccaa ttatggacct tcctcccttc ttccctttccct 990
ccttcctcc tcctcccttc tcctcccttc tcctcccttc ttccctttccct 1050
tttttctttt tctctttttt ctttattttt tgggtctcac tcttcatacc caggcttagag 1110
tgcaagtggca caaaatctc ggctcaactgc agccttgact tcccaaggctt aggttcagg 1170
gatccctaca ctttaggcctc ccaagttactt gggactacag gcacgcacca ccatgcctag 1230
ctattctttt gtatttttgg tagagacagg gttttgttgtt gttgtctcagg ctgggtctggaa 1290
acccctaggc tcaaattgtq tgcccactc ggcctcccaa agtgcgtggaa ttacaggcat 1350
gaaccggccat gcctggccct tttttaaaaaaa aaaaatcttta gggatttctt 1410
agaccctatg tagattattta atgaacaaaaa gattaaactc caaatattaa attagtaaggc 1470
tgaaaggaaatc tgaaacactt gtacttccaa ttttctttaa ataatccaa atagaccaga 1530
attggcccat accatagaag aaagaattgg cagtccaaaa aaaa 1574

FIG. 6C

cattagatc cgccaggatt cgaggac atg ccg ttg acc ttg tta cag gac tgg 54
Met Pro Leu Thr Leu Gln Asp Trp
1 5

tgt cgg ggg gaa cac ctg aac acc ccg agg tgc atg ctc atc ctg ggg 102
Cys Arg Gly Glu His Leu Asn Thr Arg Cys Met Ile Leu Gly
10 15 20 25

atc ccc gag gac tgt ggc gag gat ggg ttt gag gag aca ctc cag gag 150
Ile Pro Glu Asp Cys Gly Glu Asp Glu Phe Glu Thr Leu Gln Glu
30 35 40

gct tgc agg cac ctg ggc aga tac agg gtg att ggc agg atg ttt agg 198
Ala Cys Arg His Leu Gly Arg Tyr Arg Val Ile Gly Arg Met Phe Arg
45 50 55

agg gag gag aac gcc cag gcg att cta ctg gag ctg gca caa gat atc 246
Arg Glu Asn Ala Gln Ala Ile Leu Glu Leu Ala Gln Asp Ile
60 65 70

FIG. 7A

gac tat gct ttg ctc cca agg gaa ata cca gga aag	ggg	ggg	ccc	tgg	294
Asp Tyr Ala Leu Pro Arg Glu Ile Pro Gly Lys Gly	Pro	Gly	Trp		
75	80	85			
gaa gtg att gta aaa ccc cgt aac tca gat	ggg	gaa	ttt	ctc	342
Glu Val Ile Val Lys Pro Arg Asn Ser Asp Gly	Glu	Phe	Leu	Asn	
90	95	100	Arg		
ctg aac cgc ttc tta gag gag egg acc gtg tca	aat	atq	aac	390	
Leu Asn Arg Phe Leu Glu Glu Arg Arg Thr Val	Asp	Ser	Met		
110	115	120	Asn		
cga gtc ctc ggg tcg acc aat tgt tcg gct cca	aga	gtg	act	ata	438
Arg Val Leu Gly Ser Asp Thr Asn Cys Ser Ala	Pro	Arg	Val	Thr	
125	130	135	Ile		
tca cca gag ttc tgg acc tgg gcc cag act ctg	ggg	gca	gtg	cag	486
Ser Pro Glu Phe Trp Thr Trp Ala Gln Thr Leu	Gly	Ala	Ala	Val	
140	145	150	Gln		
cct ctg cta gaa caa atg ttg tac cga gaa cta	aga	gtg	ttt	tct	534
Pro Leu Leu Glu Gln Met Leu Tyr Arg Glu Leu	Arg	Val	Phe	Ser	
155	160	165	Gly		
aac acc ata tcc atc cca ggt gca ctg gcc ttt	gtt	gcc	tgg	ctt	582
Asn Thr Ile Ser Ile Pro Glu Ala Leu Ala Phe	Asp	Ala	Trp	Leu	
170	175	180	Glu		

FIG. 7B

cac acc act gag atg cta cag atg tgg cag gtg ccc gag ggg gaa aag	630
His Thr Thr Glu Met Leu Gln Met Trp Gln Val Pro Glu Gly Glu Lys	
190	195
195	200
agg cgg agg ctg atg gaa tgc tta cgg ggc cct gct ctc cag gtg gtc	678
Arg Arg Arg Leu Met Glu Cys Leu Arg Gly Pro Ala Leu Gln Val Val	
205	210
210	215
agt ggg ctc cgg gcc agc aat gct tcc ata act gtg gag gag tgc ctg	726
Ser Gly Leu Arg Ala Ser Asn Ala Ser Ile Thr Val Glu Glu Cys Leu	
220	225
225	230
gct gcc ttg cag cag gtg ttc gga cct gtg gag agc cat aaa att gcc	774
Ala Ala Leu Gln Gln Val Phe Gly Pro Val Glu Ser His Lys Ile Ala	
235	240
240	245
cag gtg aag ttg tgt aaa gcc tat cag gag gca gga gag aaa gta tct	822
Gln Val Lys Leu Cys Lys Ala Tyr Gln Glu Ala Gly Glu Lys Val Ser	
250	255
255	260
260	265
agc ttg tta cgt ttg gaa ccc ctg ctc caa aga gct gta gaa aac	870
Ser Phe Val Leu Arg Leu Glu Pro Leu Leu Gln Arg Ala Val Glu Asn	
270	275
275	280
aat gtg gta tca cgt aga aac gtg aat cag act cgc ctg aaa cga gtc	918
Asn Val Val Ser Arg Arg Asn Val Asn Gln Thr Arg Leu Lys Arg Val	
285	290
290	295
tta agt ggg gcc acc ctt cct gac aaa ctc cga gat aag ctt aag ctg	966

FIG. 7C

Leu	Ser	Gly	Ala	Thr	Leu	Pro	Asp	Lys	Leu	Arg	Asp	Lys	Leu	Lys	Leu
300								310							
atg	aaa	cag	cga	agg	aag	cct	cct	ggt	tcc	ctg	gcc	ctg	gtg	aag	ctc
Met	Lys	Gln	Arg	Arg	Lys	Pro	Pro	Gly	Phe	Leu	Ala	Leu	Val	Lys	Lys
315															
ctg	cgt	gag	gag	gag	gaa	tgg	gag	gcc	act	tta	ggt	cca	gat	agg	gag
Leu	Arg	Glu	Glu	Glu	Glu	Trp	Glu	Ala	Thr	Leu	Gly	Pro	Asp	Arg	Glu
330															
agt	ctg	gag	ggg	ctg	gaa	gtt	cca	agg	cca	cct	gcc	agg	atc	act	1110
Ser	Leu	Glu	Gly	Leu	Glu	Val	Ala	Pro	Arg	Pro	Pro	Ala	Arg	Ile	Thr
															345
350															
ggg	gtt	ggg	gca	gtt	cct	ctc	cct	gcc	tct	ggc	aac	agt	ttt	gat	gcg
Gly	Val	Gly	Ala	Val	Pro	Leu	Pro	Ala	Pro	Asn	Ser	Phe	Asp	Ala	
															360
365															
agg	cct	tcc	cag	ggc	tac	cgg	cgg	agg	ggc	aga	ggc	caa	cac	cga	1158
Arg	Pro	Ser	Gln	Gly	Tyr	Arg	Arg	Arg	Gly	Arg	Gly	Gln	His	Arg	
															375
380															
agg	ggt	ggg	gtt	gca	agg	gtt	ggc	tct	cga	ggc	tca	aga	aaa	cgg	aaa
Arg	Gly	Gly	Vai	Ala	Arg	Gly	Ser	Arg	Gly	Arg	Gly	Gln	His	Arg	
															390
395															
cgc	cac	aca	tcc	tgc	tat	agc	tgt	ggg	gaa	gac	ggc	cac	atc	agg	gtt
Arg	His	Thr	Phe	Cys	Tyr	Ser	Cys	Gly	Glu	Asp	Gly	Gly	Ile	Arg	Vai
															420
410															

FIG. 7D

cag tgc atc aac ccc tcc aac ctg ctc ttg gta aag cag aag aaa cag 1350
Gln Cys Ile Asn Pro Ser Asn Leu Leu Val Lys Gln Lys Lys Gln
430 435 440

gct gca gtt gag tcg gga aac ggg aac tgg gct tgg gac aag agc cat 1398
Ala Ala Val Glu Ser Gly Asn Gly Trp Ala Trp Asp Lys Ser His
445 450 455

ccc aag tcc aag gcc aag taggctcgaa agaacaggc aacatttcct 1446
Pro Lys Ser Lys Ala Lys
460

accacagccc aaggagacaa aagagatatt gggaggagg gaaaggagg cccagacaaa 1506
cagcagatga gttgagtggg gcagaggag aggccagcca gaccaaggcc aagcnnttctc
acccttnggc cagtttggc ggacttttag caaccaagac cacctggcaa caggctcagt
gggggtcagg tccaggccc cgaaggaggctg ctggaggaga aagcaggag ccactgcatt
cagcacatgg ggtgcttggg ccttcagatgg ggaccccaa gaaggcagaat ctgaaagg
tacggctggg ggttctgtcc tgctcatcca accacccta aataccacc ctgtggactt
tgagctgaac atgcctactg gccccccaggc cacaatggac ctggaggagg ctacctgggg
ccagcagggtg ccaggccctg tgagggctgg tgagggagg ctggggggca gaggtaaagg
cctgccccctg ccaggccctg gtccatcccg tcttcaggat catctacact gcacttaggg
cctgcaaggagg aggccacagg ctggggggcc tggcccaatgt accctaaaggc 1986
aggcccaggaa aggccacacc agggcaggc ctttccatgtt ctttcaggat 2046
ccggggaggc ctttccatgtt ctttccatgtt ctttccatgtt 2106
gacccccaggc aggggtactg ggttccatgtt ctttccatgtt 2166
agggtggctg tgaaggaaag gtttccatgtt ctttccatgtt 2226
gacccccaggc aggggtactg tgaaggaaag gtttccatgtt ctttccatgtt 2248
ggttccatgtt ctttccatgtt 99

FIG. 7E